

## Algoma Township Fact Sheet for PFAS

**Here is some information we have put together with the help of the Kent County Health Department, the Michigan Department of Health and Human Services, the Department of Environmental Quality, and the State of Michigan taskforce on PFAS:**

Per-fluoroalkyl and poly-fluoroalkyl substances (PFAS) are a large group of man-made chemicals that are fire resistant, repel oil, stain, grease, and water and have been used in industry and consumer products worldwide since the 1950s. PFAS are used in fire-fighting foams, nonstick cookware, fast food wrappers, some cosmetics and cleaning products, as well as in industry and manufacturing. *PFOA and PFOS are the primary types of PFAS that have been the focus of DEQ's investigations regarding Wolverine Worldwide's disposal activities.*

- PFAS do not occur naturally, but are widespread in the environment.
- PFAS are found in most people, wildlife and fish all over the world.
- Some PFAS can stay in people's bodies a long time. The human body releases PFOA and PFOS at a rate of ½ over 3 years.
- Some PFAS do not break down easily in the environment.

Completely preventing exposure to PFAS is unlikely, but there are recommendations for reducing individual exposures in the general population. (see [ATSDR document link below](#))

The U.S. Environmental Protection Agency (EPA) has set a Lifetime Health Advisory (LTHA) level for two PFAS in drinking water: perfluorooctanoic acid (PFOA) and perfluorooctane sulfonic acid (PFOS). The LTHA level is 70 parts per trillion (ppt) for PFOA and PFOS combined. The number 70 ppt is equal to 70 ng/L.

The Michigan Department of Health and Human Services (MDHHS) advice is based on the best available science and, per the EPA LTHA, is protective of everyone, especially pregnant women, young children, and the elderly. When levels, or amounts, exceed the EPA LTHA of 70 ppt for PFOA and PFOS (singly or combined total concentration), MDHHS recommends bottled water or filters. When detections are lower than the EPA LTHA, MDHHS has also recommended bottled water or filters are used in situations when it is uncertain that these chemicals will continue to be at low levels in your well water. A thorough investigation is needed to understand the extent of contamination, where the source is, what aquifers might be contaminated at what concentrations, the direction of groundwater flow, and

movement of the contamination. This information, in relation to the location and depth of a private well, is needed to determine the need for an alternate water supply.

**Fact:** A home water filtration system can reduce the PFAS contaminant levels in drinking water.

When using a Point of Use Filter, it must be certified to reduce PFOA and PFOS, two of the PFAS and be constructed to consider the PFAS contaminant level, and the volume of water to be used. (See below for filters and pricing.)

At this time, there are not whole home water systems "certified" to remove PFOA and PFOS. However, they will reduce these chemicals and are being improved every year.

**\*\*If you already have a filtration system in your home consider contacting the manufacturers of the filtration system. They may be able to make recommendations to optimize reduction of PFAS. This will likely include more sophisticated media cartridges or increasing the frequency of exchanging filter media.\*\***

Any filtration system must also be maintained in order to be effective. Follow the manufacturer's maintenance instructions.

For bottled water questions (how it is treated and if it is safe) contact the CFSAN (FDA's Center for Food Safety and Applied Nutrition) Information Center at 1-888-SAFEFOOD (1-888-723- 3366).

### **Regarding those impacted by Wolverine Disposal Sites:**

~For homes with lab confirmed PFOA and/or PFOS detections greater than (>) 70 ppt and who are confirmed by DEQ to be impacted by Wolverine disposal activities, Wolverine has offered whole house filters and point of use filters to provide a reliable drinking water source.

\*If you have been notified by MDHHS or your local health department that PFAS were found in your well water sample, and that you are near a PFAS source, MDHHS recommends that you do not use your well water for drinking, cooking, preparing food, washing fruits or vegetables, or brushing your teeth, unless your well water is filtered using a system certified to reduce PFOA and PFOS. (Touching the water is not harmful. You can bathe, wash dishes, launder your clothes, and clean with your well water.)\*

~For homes with lab confirmed PFOA and/or PFOS detections less than (<) 70 ppt, and who are confirmed by DEQ to be impacted by Wolverine disposal activities, Wolverine has offered to install point of use filtration systems to provide a reliable drinking water source.

~For homes with lab confirmed PFOA and/or PFOS detections less than (<) 70 ppt, and who are not impacted by Wolverine disposal activities, a homeowner may choose to install a NSF certified Point of Use filter to provide a reliable drinking water source.

There are many options that you will want to research. We cannot advocate one brand over another, nor can we recommend a particular company over another to install water filtration systems. However, listed below are types of filters and the recommended NSF International certification numbers so you can research what will be best for you and your family:

### **Filters and Pricing**



The AquaSana 3-Stage Claryum Under Counter Max Flow filtration system is one of those certified by the NSF International to reduce PFOA and PFOS by 96 percent. (AQ-5300+)

**The main descriptor on your filter should state that it meets NSF – P473 standards. This is the kind that has been tested and shown to reduce 96% of PFOS and PFOA**

### **“Point of Use” filters (where you use water for drinking and cooking):**

These can be installed and possibly connected elsewhere i.e. sinks, refrigerators or pot fillers by an extension hose. They must be **NSF – P473 certified**. Cartridges must be replaced in a timely manner to effectively reduce contaminants. Many of these have a notification system to let you know when to replace them.

These run around \$375-\$700 and can be found on sale.

You can find **NSF – P473** certified point of use filters in home improvement stores and online which many people can install themselves or have a handy person install.

### **Whole home water filtration system:**

These are installed at the “Point of Entry” (where the water comes into the home). Further testing may be required after install to ensure that these systems are reducing PFAS. There are no whole home systems certified by the NSF International at this time.

Whole home systems should be installed by a professional. They run between \$1,500 and \$5,000 depending on your home and needs.

**Reminder:** if you have been tested to have higher than 70ppt levels of these chemicals in your water, you will need to change your filters more frequently. Timely maintenance of these systems is required, and should be factored in the cost.

### **For professional installation of water filtration, here is a list of some local providers:**

- Bayes Water Treatment - 745 State St. Sparta, MI (616) 887-9378
- Culligan Water Conditioning of Greenville and Rockford - 817 S Lafayette St, Greenville, MI (616) 754-3858
- Gordon Water Systems - 100 54th St SW, Grand Rapids, MI (616) 776-3800

**\*\*You can find Point of Use filters online.** Be sure they are properly certified and come with comprehensive instructions. (Amazon, Google Search, etc)

## Resources

This website is from the National Sanitation Foundation International and lists multiple brands and capacities for both Point of Use and Whole Home Filtration.

<http://info.nsf.org/Certified/DWTU/Listings.asp?TradeName=&Standard=P473&ProductType=&PlantState=&PlantCountry=&PlantRegion=&submit3=Search&hdModlStd=ModlStdIt%20is%20recommended%20to%20use%20NSF%20approved%20filters>

Here is a product page directly from the Aquasana site:

<http://cdn.aquasana.com/assets/AQ-5300+ Performance Data.pdf>

**Additional information or FAQ can found on these helpful websites:**

DEQ

[http://www.michigan.gov/som/0,4669,7-192-45414\\_45929\\_83470\\_82704\\_83030-451382--,00.html](http://www.michigan.gov/som/0,4669,7-192-45414_45929_83470_82704_83030-451382--,00.html)

FAQ's

[www.michigan.gov/som/0,4669,7-192-45414\\_45929\\_83470\\_82704\\_83030-451382--,00.html](http://www.michigan.gov/som/0,4669,7-192-45414_45929_83470_82704_83030-451382--,00.html)

ATSDR Fact Sheet

[www.atsdr.cdc.gov/pfc](http://www.atsdr.cdc.gov/pfc)

**Sources:** Michigan.gov, ATSDR, Kent County Health Department, NSF International, Department of Environmental Quality, MDHHS